

3.0 AFFECTED ENVIRONMENT

The existing and anticipated future characteristics of the Wood River Valley that could be affected by SH-75 alternatives were described in Chapter 3 Affected Environmental of the DEIS. Chapter 3 documented the following topics and resources. This FEIS supplements the DEIS information for those topics and resources as noted:

- 3.1 Population and Demographics
- 3.2 Land Use – supplemental information provided below
- 3.3 Parks and Recreation
- 3.4 Community Services and Neighborhoods
- 3.5 Economics
- 3.6 Visual Resources
- 3.7 Noise
- 3.8 Air Quality – supplemental information provided below.
- 3.9 Pedestrians and Bicycles – supplemental information provided below.
- 3.10 Farmland, Soils and Geohazards
- 3.11 Water Resources
- 3.12 Vegetation
- 3.13 Wetlands – supplemental information provided below.
- 3.14 Wildlife and Wildlife Habitat – supplemental information provided below
- 3.15 Fisheries – supplemental information provided below
- 3.16 Cultural Resources
- 3.17 Hazardous Materials and Underground Storage Tanks

Except as specified below, the description of the Affected Environment in the DEIS is valid for this condensed FEIS. The following updates address changes since the DEIS was prepared and issued for comment, and comments received during the comment period. The information presented below is cross-referenced to the section and page number of the corresponding section of the DEIS.

3.1 Local Plans *(supplements Section 3.2.2, Page 3-21 of DEIS)*

Section 3.2.2 of the DEIS presented a discussion of local plans in place during 2002 and 2003. As of the date of this FEIS, the plans referenced below and discussed in the DEIS are still valid and in effect. As part of their comments on the DEIS, Blaine County and the Cities of Carey, Bellevue, Hailey, Ketchum and Sun Valley submitted a brief summary of the transportation related components of these comprehensive plans and transportation plans. These were reviewed during preparation of this FEIS. The consistency of the Preferred Alternative with these plans is assessed in Section 5.1.3 of this FEIS.

The following text is drawn from the comments on the DEIS submitted from the six jurisdictions noted above. *This text replaces that contained in Section 3.2.2, pages 3-21 and 3-22 of the DEIS.*

3.1.1 **Blaine County** *(replaces Section 3.2.2.1, page 3-21 of the DEIS)*

The *Blaine County Comprehensive Plan* and the *Blaine County Public Transportation Feasibility Study* are two County plans that are relevant to any proposed SH-75 transportation Improvements.

1 The Comprehensive Plan was adopted in 1994; its accompanying land use map was adopted in 1995. The
2 "Road System" section of the plan includes 28 recommendations for the County's roadway and
3 transportation system. Recommendation 24 states:

4 "Actively pursue an expansion of Highway 75 between the cities of Bellevue and Ketchum. To the
5 extent possible, the design of any highway improvements should recognize the community desire
6 to minimize the visual impact of the highway system in a narrow scenic valley. The community
7 should participate in the design of any improvements to the highway."

8 The Road System section also includes several recommendations with respect to access control and design
9 of SH-75 improvements, protection and enhancement of the community's trail system, and development of a
10 public transportation system.

11 The County's Comprehensive Plan states that Highway 75 corridor has been designated in the
12 Comprehensive Plan as a Scenic Corridor and as a primary tourist attraction into and through Blaine
13 County. The importance to the recreational and tourism economy of the Scenic Corridor is covered in other
14 sections of the Plan, however all planning criteria for Highway 75 contained in the comprehensive plan are
15 measured in the context of this designation.

16 Blaine County prepared a *Blaine County Public Transit Feasibility Study* in 2001 that recommended short,
17 mid-term and long-term strategies to develop a public transportation system. Short term strategies were
18 intended to be implemented within 2 years and include the following:

- 19 • A public education and promotional campaign to raise awareness of the public transportation
20 options currently available as well as the strategies being considered for the future
- 21 • Enhanced KART service within Ketchum and Sun Valley
- 22 • An enhanced Wood River Rideshare program
- 23 • Special events bus service between Bellevue and Ketchum/Sun Valley
- 24 • Blaine County should coordinate with ITD and local communities on short-term capital
25 improvements to support public transportation.
- 26 • Development of peak-hour HOV queue bypass lanes¹² on Highway 75 near East Fork
- 27 • Development of peak-hour HOV queue bypass lanes on Highway 75 near Elkhorn
- 28 • Active participation in the Timmerman to Ketchum Environmental Studies.

29 Mid term strategies were proposed for the two to five year timeframe and are based on continued
30 coordination between Blaine County and ITD with the intent that public transportation will play a larger role
31 in solving the County's traffic problems. Recommended strategies include:

- 32 • Initiating regularly scheduled peak-hour bus service in the Bellevue to Ketchum/Sun Valley corridor
- 33 • Initiating a transportation management program, including paid parking in the Ketchum central
34 business district
- 35 • Constructing transit stations and park-and-ride lots for commuter bus service in the Bellevue to
36 Ketchum corridor
- 37 • Developing peak hour HOV lanes or some other means of providing preferential treatment for high
38 occupancy vehicles on HWY 75 between Bellevue and Ketchum
- 39 • Identifying and preserving an alignment for a future fixed guide way corridor

¹² A queue bypass lane refers to traffic operations at a traffic signal whereby vehicles in the HOV lane are given priority. This may be either through the use of an additional signal phase to allow the HOV lane to proceed before the single occupancy vehicle lane, or through the use of a separately constructed lane that will bypass the main traffic queue. The feasibility study did not specify a specific form for the HOV queue bypass lane.

1 Long term strategies were proposed for a timeframe beyond 5 years and include the following:

- 2 • Initiating all-day scheduled bus service in the Bellevue to Ketchum/Sun Valley corridor
- 3 • Initiating peak-hour bus service to more distant communities, including Carey and Twin Falls
- 4 • Initiating local circulator bus service in Bellevue and Hailey
- 5 • Constructing park-and-rides in Carey, Twin and other communities served by peak hour transit
- 6 • Completing the implementation of the Timmerman to Ketchum project
- 7 • Develop a proposal for fixed guide way transit in the Highway 75 Corridor

8 In addition to the Blaine County Comprehensive Plan and the Blaine County Transit Feasibility Study,
9 Chapter 21A of the Blaine County Code Title 9 Zoning Regulations defines a Scenic Highway Overlay
10 District for the SH-75 corridor. This section of the code defines setbacks from SH-75 and the heights of
11 fences, berms, and other barriers adjacent to SH-75. The following excerpt from the Blaine County Code
12 describes the overlay zone intent:

13 This Chapter is intended to provide measures to protect visual resources and allied economic
14 interests associated with Scenic Corridor 1 (SC1), as defined in [Chapter 2](#) of this Title, in addition
15 to those measures found in [Chapter 21](#) of this Title, and to assist in providing for safety of passage
16 on Idaho State Highway 75. Prior to the addition of this Chapter, Blaine County has been regulating
17 development within one hundred feet (100') of Highway 75. It is important that current owners and
18 potential purchasers of property that includes land within the Scenic Highway Overlay District
19 recognize the significance of the public policy and land use interests reflected in this Chapter, and
20 the additional requirements under this Code applicable to that land.¹³

21 The code also specifies a process for construction of walls, berms, fences and trees that do not qualify as a
22 categorical exclusion under the code:

23 Unless a categorical exclusion applies, construction of freestanding walls, earthen berms, fences
24 and sight obscuring screens of trees within the Scenic Highway Overlay District require a site
25 alteration permit, which is a type of special use permit authorized by Idaho Code section 67-6512.

26 **3.1.2 City of Bellevue** *(replaces Section 3.2.2.2 of the DEIS, page 3-21)*

27 The *Comprehensive Plan for the City of Bellevue* was adopted in September 2002. Chapter 9
28 Transportation contains guiding policies.

29 Guiding Policy 1 is to provide a safe and efficient transportation system that will meet the needs of the
30 community. Actions to implement this policy include:

- 31 1. Traffic control methods should be kept functional and in good repair to provide for the safe and
32 efficient circulation of traffic, and safety of pedestrians. With the growth projections done, the city
33 should examine the option of placing traffic lights at appropriate areas to accommodate increased
34 vehicular, bike, and foot traffic.
- 35 2. Establish bike routes that interconnect residents and business areas within the Wood River Trail
36 System to provide a safer environment for bicycle usage.
- 37 3. Maintain areas within the central business district for the parking of bicycles.
- 38 4. Encourage commercial deliveries of incoming freight and off-street parking to be through the
39 alleyways
- 40 5. Research the possibility of temporarily leasing vacant lots and open space for snow storage.

¹³ Obtained from the Blaine County Code via the internet at <http://66.113.195.234/ID/Blaine%20County/index.htm>

1 Guiding Policy 2 states that the City should upgrade the transportation system when the opportunity is
2 available. New street development shall be reviewed to determine the effect on existing streets.

3 The land use section of the Comprehensive Plan contains a guiding policy to "maintain Bellevue's historic,
4 small town, rural atmosphere". One implementing action is to "maintain strict design review standards for all
5 developments adjacent to SH-75".

6 **3.1.3 City of Hailey** *(replaces Section 3.2.2.3 of the DEIS, page 3-22)*

7 The *City of Hailey Comprehensive Plan* was revised in January 2000. Section 10.0 of the plan addresses
8 transportation and circulation. Within this section, the City assessed Hailey strengths and weaknesses and
9 listed "no location transportation within Valley" as the first weakness. The plan stated that along with
10 designated pedestrian and bicycle routes that will connect to a commuter bus via a centrally located transit
11 station, development along those routes should include transit shelters for commuters and students who
12 ride the school busses.

13 Under the engineering section, the City of Hailey has a goal to "create and maintain a pedestrian and
14 bicycle-friendly community that provides safe, convenient and efficient multi-modal transportation for all
15 Hailey residents, that moves people and not just cars, and that preserves and enhances our quality of life."
16 The stated policy is to promote long-term planning and development of an interconnected and integrated
17 multi-modal transportation system and to contain or reduce the number of single occupant vehicle trips.

18 To implement this goal and policy, the Plan included the following Implementation plan:

- 19 a. Create and implement a Transportation Master Plan.
- 20 b. Participate in, and support, regional transportation planning for traffic and transportation
21 management.
- 22 c. Support efforts to create a public transportation system that includes a local circulator shuttle within
23 walking distance of most Hailey residents, as well as commuter service within the Wood River
24 Valley corridor.

25 An addition stated policy was to promote land development that discourages urban sprawl, connects the
26 community, and encourages multi-modal use. To implement this goal, the City plan included the following:

- 27 a. Create clear entrances at our north and south to define Main Street and our community (where to
28 slow down).
- 29 b. Balance parking needs with multi-modal transportation needs. Minimize the effect of large parking
30 lots with landscape buffers and islands.
- 31 c. Encourage neighborhoods service centers that serve the adjacent neighborhoods.
- 32 d. Encourage or require transit shelters along designated transit routes.
- 33 e. Encourage multi-use development closer to or along transportation corridors.

34 The Plan contains an education goal that recognizes that engineering and education are better tools for
35 traffic management than enforcement and that creative street designs should be used to manage
36 transportation demands. Education should be used to encourage healthy transportation choices.

37 The Plan's stated policy to maximize transportation opportunities and minimize tax dollars is to be
38 implemented through the following actions:

- 39 a. Explore, create and foster cooperative opportunities with other county and regional resources.
- 40 b. Ensure that Hailey participates in long-term county wide transportation efforts.

1 c. Work with other resources and jurisdictions to provide a cohesive transportation system for our
2 countywide community.

3 d. Explore and support efforts for a public transportation system that provides regional commuter
4 services and connects to a local shuttle service within Hailey.

5 Under the Enforcement section, a goal to ensure that future growth does not place undue demands on
6 Hailey's current quality of life, transportation infrastructure, rural character, or environmental quality,
7 including clean air, is stated. A related policy is that standards for development should encourage multi-
8 modal transportation. To implement this goal and policy, the Plan states the following implementation
9 strategies:

10 a. Residential development of 20 units or more and commercial development of 20,000 square feet or
11 more should provide a Transportation Management Study and should construct the infrastructure
12 necessary to meet the transportation needs of that development, such as transit shelters,
13 sidewalks and pathways, park-and-ride parking spaces, etc.

14 b. Review the parking ordinance to establish appropriate minimum and maximum numbers of parking
15 spaces for development. Encourage creative alternatives to larger parking lots, such as shared
16 parking, public transit, special event shuttles, etc. Explore other means to balance parking needs,
17 such as parking meters.

18 **3.1.4 City of Ketchum** (replaces Section 3.2.2.4 of the DEIS, page 3-22)

19 The *Ketchum Transportation Study*, 2004 recommended long-range strategy emphasizing support for
20 pedestrian and bicycle modes within Ketchum, the expansion of transit service to/from and within Ketchum,
21 and finally road improvements where necessary. The effectiveness of transit strategies requires a
22 supporting strategy of parking controls in the downtown area and other major employment centers. Initial
23 elements of this long-range strategy include:

- 24 • Expansion of KART system for higher frequency and reduced waits; and
- 25 • Expansion of Peak Bus commuter service.

26 The Study also indicates that over time, the following pedestrian and transit elements of the plan would be
27 gradually expanded on an annual basis to keep up with growth

- 28 • Annual expansion of Peak Bus commuter service; and,
- 29 • Annual expansion of KART neighborhood circulation program

30 The Plan recommended that the City of Ketchum should also work with Blaine County and ITD to achieve
31 the following goals:

- 32 • Enhance transit and carpool operations between the hospital area and downtown Ketchum; and,
- 33 • Investigate the possibility of creating a bus corridor from Hailey to Ketchum.

34 Part 6 Transportation of *The City of Ketchum Comprehensive Plan*, 2001 contains the following goals and
35 policies that are relevant to the SH-75 corridor:

36 Goal 2: Design safe roads and other transportation systems that support the Wood River
37 Valley and maintain Ketchum's small town mountain character.

38 Goal 3: Develop a valley wide mass transit system with other jurisdictions for the employees,
39 residents and tourists of Blaine County

40 Goal 4: Reduce the number of single occupancy vehicles and vehicle trips and promote
41 alternative transportation

- 1 Policy 6.1 Ensure that transportation decisions are made comprehensively for all of Blaine
2 County, including the consideration of all modes of travel and potential impacts to
3 land uses.
- 4 Policy 6.2 Work with the Idaho Transportation Department, other Blaine County jurisdictions and
5 citizen groups to develop a County wide transportation plan which includes mass
6 transit.
- 7 Policy 6.6 Improve current Ketchum Area Rapid Transit system, including a high frequency, City
8 wide mass transit service focusing on times and stop locations to serve tourists,
9 residents and workers. When ridership is down increase service instead of
10 decreasing service.
- 11 Policy 6.7 Restrict and reduce access points along Highway 75, Warm Springs Road, Saddle
12 Road and Sun Valley Road. Provide for a landscape buffer on these roadways.
- 13 Policy 6.8 Place a high priority on developing safe, convenient and attractive bicycling and
14 walking systems that are integrated with other transportations systems.
- 15 Policy 6.10 Wherever possible reduce the lane width for vehicular travel to promote traffic
16 calming and to allow room in the rights-of-way alternative modes of transportation to
17 preserve the small mountain town character of Ketchum.

18 The Ketchum Comprehensive Plan includes short-term, mid-term, and long-term action plans for
19 transportation. Stated short term actions include:

- 20 • Work with KART, other interested agencies and citizen groups to develop a program to encourage
21 the reduction of vehicle trips in Ketchum through development of alternatives to single occupancy
22 vehicle trips.
- 23 • Develop a plan for implementing a valley wide transit system
- 24 • Clean, improve, and maintain the shoulder of the stretch of Highway 75 between River Street and
25 Serenade Lane, and between Saddle Road and Sixth Street, and along Warm Springs Road,
26 including adding pavement and trimming vegetation for safe pedestrian and bicycle travel.

27 Stated mid-term actions include:

- 28 • In conjunction with the other jurisdictions and citizen groups in the county, implement a mass
29 transit system to serve the Wood River Valley along the Highway 75 corridor.
- 30 • Construct or require the construction of transit shelters
- 31 • Ensure the KART schedule efficiently transports employees from their residents to downtown
32 Ketchum and other large areas of employment, in addition to maintaining the service for tourists
33 and skiers.

34 A stated long-term action is to work with the other jurisdictions and citizen groups in the County to expand
35 the mass transit system to other modes of mass transit to service additional outlying areas.

36 On September 8, 2006, the City of Ketchum adopted the "Downtown Ketchum Master Plan". It was
37 prepared to clarify community priorities, establish a vision for Downtown's future, specify guiding principles,
38 identify major improvement opportunities, and expand outreach and teambuilding within the community. It

contains a number of guiding principles with respect to downtown form. Principles that address transportation and circulation include the following:¹⁴

- Downtown circulation should balance the needs of pedestrians, bicyclists, transit riders and motorists alike.
- The circulation system will accommodate people and their various travel needs, providing convenient access for all user groups including businesses, employees, residents, customers, visitors and tourists.
- Downtown circulation should accommodate travel for school children, bicyclists, public transit, seniors and people with mobility challenges.
- Downtown is a pedestrian-priority district.
- Traffic demand management will include programs that offer a healthy mix of transportation modes to reduce automobile dependency and to increase the number of people access Downtown by foot, bicycle or transit..

Although the plan describes eight types of recommended physical improvements in the downtown (page 57 of the document), none include reconstruction or changes to Main Street (SH-75).

3.1.5 City of Sun Valley *(replaces Section 3.2.2.5 of the DEIS, page 3-22)*

The *City of Sun Valley Comprehensive Plan*, 2005 includes a vision statement that the City will work closely with the Wood River Valley communities to provide opportunities for the development and expansion of adequate transit and housing, as well as to participate in stewardship of the region's social and natural assets.

The Plan includes an action items to evaluate funding mechanisms to assist with the development of community housing and to mitigate the transportation impacts of off-site development. An associated objective is to manage growth and development in a manner that preserves, protects, the existing physical and natural environment by steering growth into the appropriate locations, regulating its design and by emphasizing a pattern of pedestrian and mass transit oriented travel.

3.2 Air Quality *(supplements Section 3.8 of the DEIS, page 3-96)*

In December 2007, FHWA and ITD issued revisions to Section 600.00 Air Quality of the ITD Environmental Design Manual. This revised guidance confirms that Blaine County is not a federally-designated air quality non-attainment/maintenance area (Section 650.02 Areas of Concern) for carbon monoxide and particulate matter (both PM₁₀ and PM_{2.5}).

After the DEIS was published, the Federal Highway Administration issued guidance on addressing air toxics in NEPA documents for highway projects. The following text conforms to the guidance issued by FHWA on February 3, 2006 entitled "Interim Guidance on Air Toxic Analysis in NEPA Documents". This text is also contained in Exhibit 680-6A of the revised FHWA/ITD guidance document.

3.2.1 Mobile Source Air Toxics

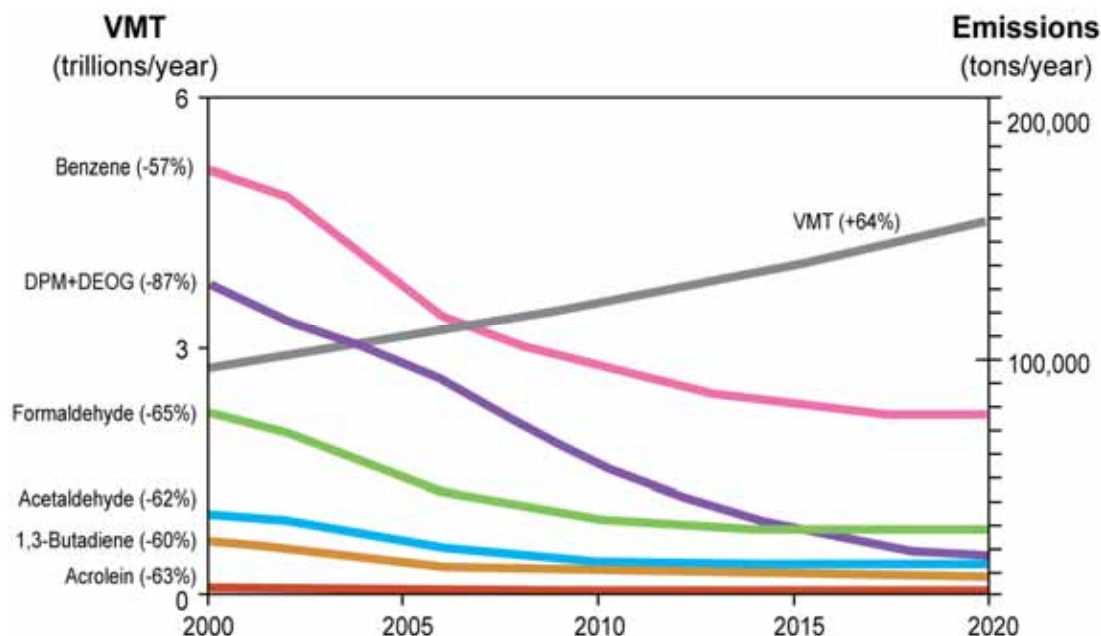
In addition to the criteria air pollutants for which there are National Ambient Air Quality Standards (NAAQS), the Environmental Protection Agency also regulates air toxics. Most air toxics originate from human-made

¹⁴ The Hudson Company, Downtown Ketchum Master Plan, January, 2006, page 16.

sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries).

Mobile Source Air Toxics (MSATs) are a subset of the 188 air toxics defined by the Clean Air Act (CAA). The MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

The EPA is the lead Federal Agency for administering the Clean Air Act and has certain responsibilities regarding the health effects of MSATs. The EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources. 66 FR 17229 (March 29, 2001). This rule was issued under the authority in Section 202 of the Clean Air Act. In its rule, EPA examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline (RFG) program, its national low emission vehicle (NLEV) standards, its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements, and its proposed heavy duty engine and vehicle standards and on-highway diesel fuel sulfur control requirements. Between 2000 and 2020, FHWA projects that even with a 64 percent increase in Vehicle Miles Traveled (VMT), these programs will reduce on-highway emissions of benzene, formaldehyde, 1,3-butadiene, and acetaldehyde by 57 percent to 65 percent, and will reduce on-highway diesel particulate matter (PM) emissions by 87 percent, as shown in the following graph:



U.S. Annual Vehicle Miles Traveled (VMT) vs. Mobile Source Air Toxics Emissions, 2000-2020

Notes: For on-road mobile sources. Emissions factors were generated using MOBILE6.2. MTBE proportion of market for oxygenates is held constant, at 50%. Gasoline RVP and oxygenate content are held constant. VMT: Highway Statistics 2000, Table VM-2 for 2000, analysis assumes annual growth rate of 2.5%. "DPM + DEOG" is based on MOBILE6.2-generated factors for elemental carbon, organic carbon and SO₄ from diesel-powered vehicles, with the particle size cutoff set at 10.0 microns.

As a result, EPA concluded that no further motor vehicle emissions standards or fuel standards were necessary to further control MSATs. The agency is currently preparing another rule under authority of CAA

1 Section 202(l) that will address these issues and could make adjustments to the full 21 and the primary six
2 MSATs.

3 **3.2.2 Unavailable Information for Project Specific MSAT** 4 **Impact Analysis**

5 This FEIS includes a basic analysis of the likely MSAT emission impacts of this project as discussed in
6 Section 5.8 of this FEIS. However, available technical tools do not enable the prediction of the project-
7 specific health impacts of the emission changes associated with the alternative in the DEIS nor for Preferred
8 Alternative. Due to these limitations, the following discussion is included in accordance with CEQ
9 regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information:

10 **3.2.3 Information that is Unavailable or Incomplete**

11 Evaluating the environmental and health impacts from MSATs on a proposed highway project will involve
12 several key elements, including emissions modeling, dispersion modeling in order to estimate ambient
13 concentrations resulting from the estimated emissions, exposure modeling in order to estimate human
14 exposure to the estimated concentrations, and then final determination of health impacts based on the
15 estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that
16 prevents a more complete determination of the MSAT health impacts of this project.

- 17 • **Emissions:** The EPA tools to estimate MSAT emissions from motor vehicles are not sensitive to
18 key variables determining emissions of MSATs in the context of highway projects. While MOBILE
19 6.2 is used to predict emissions at a regional level, it has limited applicability at the project level.
20 MOBILE 6.2 is a trip-based model--emission factors are projected based on a typical trip of 7.5
21 miles, and on average speeds for this typical trip. This means that MOBILE 6.2 does not have the
22 ability to predict emission factors for a specific vehicle operating condition at a specific location at a
23 specific time. Because of this limitation, MOBILE 6.2 can only approximate the operating speeds
24 and levels of congestion likely to be present on the largest-scale projects, and cannot adequately
25 capture emissions effects of smaller projects. For particulate matter, the model results are not
26 sensitive to average trip speed, although the other MSAT emission rates do change with changes
27 in trip speed. Also, the emissions rates used in MOBILE 6.2 for both particulate matter and MSATs
28 are based on a limited number of tests of mostly older-technology vehicles. Lastly, in its
29 discussions of PM under the conformity rule, EPA has identified problems with MOBILE6.2 as an
30 obstacle to quantitative analysis.

31 These deficiencies compromise the capability of MOBILE 6.2 to estimate MSAT emissions.
32 MOBILE6.2 is an adequate tool for projecting emissions trends, and performing relative analyses
33 between alternatives for very large projects, but it is not sensitive enough to capture the effects of
34 travel changes tied to smaller projects or to predict emissions near specific roadside locations.

- 35 • **Dispersion.** The tools to predict how MSATs disperse are also limited. The EPA's current
36 regulatory models, CALINE3 and CAL3QHC, were developed and validated more than a decade
37 ago for the purpose of predicting episodic concentrations of carbon monoxide to determine
38 compliance with the NAAQS. The performance of dispersion models is more accurate for
39 predicting maximum concentrations that can occur at some time at some location within a
40 geographic area. This limitation makes it difficult to predict accurate exposure patterns at specific
41 times at specific highway project locations across an urban area to assess potential health risk.
42 The National Cooperative Highway Research Program is conducting research on best practices in
43 applying models and other technical methods in the analysis of MSATs. This work also will focus
44 on identifying appropriate methods of documenting and communicating MSAT impacts in the

NEPA process and to the general public. Along with these general limitations of dispersion models, FHWA is also faced with a lack of monitoring data in most areas for use in establishing project-specific MSAT background concentrations.

- **Exposure Levels and Health Effects.** Finally, even if emission levels and concentrations of MSATs could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude us from reaching meaningful conclusions about project-specific health impacts. Exposure assessments are difficult because it is difficult to accurately calculate annual concentrations of MSATs near roadways, and to determine the portion of a year that people are actually exposed to those concentrations at a specific location. These difficulties are magnified for 70-year cancer assessments, particularly because unsupportable assumptions will have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over a 70-year period. There are also considerable uncertainties associated with the existing estimates of toxicity of the various MSATs, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population. Because of these shortcomings, any calculated difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with calculating the impacts. Consequently, the results of such assessments will not be useful to decision makers, who will need to weigh this information against other project impacts that are better suited for quantitative analysis.

3.2.4 Summary of Existing Credible Scientific Evidence Relevant to Evaluating the Impacts of MSATs

Research into the health impacts of MSATs is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses.

Exposure to toxics has been a focus of a number of EPA efforts. Most notably, the agency conducted the National Air Toxics Assessment (NATA) in 1996 to evaluate modeled estimates of human exposure applicable to the county level. While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the NATA database best illustrate the levels of various toxics when aggregated to a national or State level.

The EPA is in the process of assessing the risks of various kinds of exposures to these pollutants. The EPA Integrated Risk Information System (IRIS) is a database of human health effects that may result from exposure to various substances found in the environment. The IRIS database is located at <http://www.epa.gov/iris>. The following toxicity information for the six prioritized MSATs was taken from the IRIS database *Weight of Evidence Characterization* summaries. This information is taken verbatim from EPA's IRIS database and represents the Agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures.

- **Benzene** is characterized as a known human carcinogen.
- The potential carcinogenicity of **acrolein** cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.
- **Formaldehyde** is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals.
- **1,3-butadiene** is characterized as carcinogenic to humans by inhalation.
- **Acetaldehyde** is a probable human carcinogen based on increased incidence of nasal tumors in male and female rats and laryngeal tumors in male and female hamsters after inhalation exposure.

- **Diesel exhaust** (DE) is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases.
- **Diesel exhaust** also represents chronic respiratory effects, possibly the primary non-cancer hazard from MSATs. Prolonged exposures may impair pulmonary function and could produce symptoms, such as cough, phlegm, and chronic bronchitis. Exposure relationships have not been developed from these studies.

There have been other studies that address MSAT health impacts in proximity to roadways. The Health Effects Institute, a non-profit organization funded by EPA, FHWA, and industry, has undertaken a major series of studies to research near-roadway MSAT hot spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the series is not expected for several years.

Some recent studies have reported that proximity to roadways is related to adverse health outcomes -- particularly respiratory problems. Much of this research is not specific to MSATs, instead surveying the full spectrum of both criteria and other pollutants. The FHWA cannot evaluate the validity of these studies, but more importantly, they do not provide information that will be useful to alleviate the uncertainties listed above and enable us to perform a more comprehensive evaluation of the health impacts specific to this project.

3.2.5 *Relevance of Unavailable or Incomplete Information to Evaluating Reasonably Foreseeable Significant Adverse Impacts on the Environment* *(and evaluation of impacts based upon theoretical approaches or research methods generally accepted in the scientific community)*

Because of the uncertainties outlined above, a quantitative assessment of the effects of air toxic emissions impacts on human health cannot be made at the project level. While available tools do allow us to reasonably predict relative emissions changes between alternatives for larger projects, the amount of MSAT emissions from each of the project alternatives and MSAT concentrations or exposures created by each of the project alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, the relevance of the unavailable or incomplete information is that it is not possible to make a determination of whether any of the alternatives will have "significant adverse impacts on the human environment."

As discussed above, technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project. However, even though reliable methods do not exist to accurately estimate the health impacts of MSATs at the project level, it is possible to qualitatively assess the levels of future MSAT emissions under the project. Although a qualitative analysis cannot identify and measure health impacts from MSATs, it can give a basis for identifying and comparing the potential differences among MSAT emissions-if any-from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by the FHWA entitled *A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives*, found at:
www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm

3.3 Pedestrians and Bicycles *(supplements Section 3.9 of the DEIS, page 3-99)*

Section 3.9.3 of the DEIS referenced concerns with pedestrian safety in the cities of Hailey and Bellevue. In a comment submitted on the DEIS, the City of Hailey expressed concern that the description provided does not adequately reflect their concern with the issue. The following text therefore supplements that provided in the DEIS.

In June of 2003, there was a pedestrian fatality on SH-75 in the City of Hailey. This fatality, in combination with concerns expressed by the citizens of Hailey during local planning processes, and during preparation of the SH-75 DEIS, has increased both the awareness and importance of the issue of safe pedestrian crossings of SH-75. The City of Hailey is examining alternative ways of increasing the visibility of pedestrians crossing SH-75 and their safety through their Transportation Master Plan planning process. Options to increase visibility of pedestrians crossing SH-75 include installation of additional street lighting along SH-75, and/or installation of in-pavement flashing lights in the SH-75 pavement. Improving the safety of bicyclists on SH-75 through the City of Hailey may include restriping of the existing roadway to provide for on-street bicycle lanes.

A variety of pedestrian crossing safety techniques and traffic calming measures for SH-75 through the City of Hailey are being considered as part of the City's Transportation Master Planning process. Additional coordination with the City of Hailey was conducted during February 2007 to determine the status and content of this planning process. Hailey's planning process has identified possible additional curb extensions or "bulb-outs" to better accommodate pedestrians by reducing the width of pavement that pedestrians will need to cross. These curb extensions will occur within the existing SH-75 right-of-way and will be constructed in the parking lane of SH-75 in the City of Hailey. The plan's draft recommendations maintain the existing SH-75 five-lane cross-section.

3.4 Wetlands *(supplements Section 3.13 of the DEIS, page 3-127)*

3.4.1 Relative Abundance of Wetlands

Section 3.13 of the DEIS provided a description of the wetlands in the SH-75 corridor. The Environmental Protection Agency (EPA) submitted comments on the DEIS, one of which was a request to include additional information in the FEIS that addresses relative abundance of wetland communities within the watershed and relative scarcity of specific wetland plant communities. The EPA referenced an existing report on Wood River Basin wetlands as an additional source of information on that subject.¹⁵ The following discussion is based on that report and supplements the Chapter 3 Affected Environment wetlands description in the DEIS.

The Idaho Department of Fish and Game's Conservation Data Center digitized the National Wetland Inventory maps for the Big Wood River drainage from the headwaters at the confluence of the North Fork to Magic Reservoir. The dominant wetland types identified in the Big Wood Drainage are Palustrine emergent 40%, Palustrine scrub-shrub (PSS) 20% and Lacustrine limnetic 29%, Forested 5%, Littoral 4% and Unconsolidated bottom 2%. Of the three wetland types found in the project area, palustrine emergent and palustrine scrub-shrub are relatively common at 20% and 40%, respectively. The Forested wetlands were less common at 5%. Lacustrine limnetic, littoral or unconsolidated bottom wetlands were not identified in the project area.

¹⁵ Jankovsky-Jones, M., *Conservation Strategy for the Big Wood River Basin Wetlands*, 1997, Conservation Data Center, Idaho Department of Fish and Game.

1 The network of Natural Heritage Programs and Conservation Data Centers ranks the range wide (GRANK
2 or global rank) and state (SRANK or state rank) status of plants, animals, and plant communities on a scale
3 of 1 to 5. GRANK or Global Rank is a ranking of the rarity of the species, and is a useful tool in determining
4 conservation needs. The rank is primarily based on the number of known sites or observations (also known
5 as occurrences), but other factors such as habitat quality, estimated number of individuals, narrowness of
6 range of habitat, trends in populations and habitat, threats to the element, and other factors are also
7 considered. The ranking system is meant to exist alongside national and state rare species lists because
8 these lists often include additional criteria (e.g., recovery potential, depth of knowledge) that go beyond
9 assessing threats to extinction.

10 The status ranking systems using the following coding:

11 **G** = Global rank indicator; denotes rank based on range wide status.

12 **S** = State rank indicator; denotes rank based on status within Idaho.

13 **1** = Critically imperiled because of extreme rarity or because some factor of its biology makes it
14 especially vulnerable to extinction (typically 5 or fewer occurrences).

15 **2** = Imperiled because of rarity or because other factors demonstrably make it very vulnerable to
16 extinction (typically 6 to 20 occurrences).

17 **3** = Rare or uncommon but not imperiled (typically 21 to 100 occurrences).

18 **4** = Not rare and apparently secure, but with cause for long-term concern (usually more than 100
19 occurrences).

20 **5** = Demonstrably widespread, abundant, and secure.

21 **U** = Unrankable.

22 **H** = Historical occurrence (i.e., formerly part of the native biota; implied expectation that it might be
23 rediscovered or possibly extinct).

24 **X** = Presumed extinct or extirpated.

25 **Q** = Indicates uncertainty about taxonomic status.

26 **?** = Uncertainty exists about the stated rank.

27 **NR** = Not ranked.

28 **A** = Conservation status rank is not applicable.

29 The global and state rank indicator is used in conjunction with the rating. For example, G5 denotes a
30 species that was demonstrably widespread, abundant, and secure. G? denotes uncertainty about the
31 stated rank.

32 Forested wetlands: Broad-leaved deciduous forests occur on the Big Wood River, mid-sections of the Little
33 Wood River and on moderate gradients of Camas Creek. The forests are most commonly dominated by
34 black cottonwood with lesser amounts of *P. acuminata* (Rydberg's cottonwood) and occasionally quaking
35 aspen. *Populus tremuloides* also occurs in association with springs in the valley bottoms and at upper
36 elevations on tributaries to the major rivers.

37 Needle-leaved forests occur on high gradient tributaries to the Big Wood River. Fluvial landforms are
38 frequently absent due to a stream gradient that limits lateral channel migration and riparian vegetation is
39 confined to narrow streamside bands. At upper elevations forested riparian communities are dominated by
40 *Picea engelmannii* (Engelmann spruce), *Abies lasiocarpa* (subalpine fir), or *Pinus contorta* (lodgepole pine).
41 (Jankovsky-Jones, M. 1997)

42 Forested wetlands make up 5% of the Big Wood Drainage. The palustrine forested wetland communities in
43 the project occur along Trail Creek, the Big Wood River and irrigation ditches and are black

cottonwood/yellow willow and Black cottonwood/Woods rose communities. These communities were named and ranked globally (G) and by state (S) based on the *Conservation Strategy for the Big Wood River Basin Wetlands* (Jankovsky-Jones, M. 1997). This report also suggest protection of all cottonwood stands identified in the report as well as those that provide flood water storage for urban areas. Table 3-1 shows the rank for Palustrine forest communities in the SH-75 project area.

Table 3-1: Palustrine Forest Communities in the Project Area

Scientific Name	Common Name	Rank
<i>Populus trichocarpa/Salix lutea</i>	Black cottonwood/Yellow willow	G?, S? Both the global and state rank are uncertain.
<i>Populus trichocarpa/Rosa woodsii</i>	Black cottonwood/Wood's rose	GQ, S1 The global rank is uncertain about the taxonomic status.

Within the SH-75 corridor, Wetland 20 at the Big Wood Bridge is part of the cottonwood forest that exists along the Big Wood River. However, portions of this area have historically been disturbed such that few cottonwood trees exist adjacent to the bridge.

Scrub-shrub vegetation: Shrublands dominated by willows and other shrubs are common throughout the Big Wood River Basin. Tall willow shrublands, associated with high gradient channels at lower elevations or occurring as a mosaic with cottonwood dominated stands on larger river systems such as the Big Wood River, contain a number of willow species. These include *Salix exigua* (coyote willow), *S. lutea* (yellow willow), and *S. lasiandra* ssp. *caudata* (whiplash willow). *Alnus incana* (mountain alder) and *Betula occidentalis* (water birch) communities. These are well represented in the survey area. *Alnus incana* is common on high gradient streams at the upper limit of the cottonwood zone. *Betula occidentalis* occurs at lower elevations along low gradient rivers. A single stand of *Crataegus douglasii* (Douglas hawthorne) in poor condition was located along a tributary to Rock Creek in the Camas Creek drainage. *Crataegus* dominated stands may have been more widespread throughout the Big Wood River Basin with grazing practices reducing their extent. At mid to upper elevations willow dominated vegetation associated with low gradient meandering channels, dominated by *Salix geyeriana* (Geyer's willow) and *S. boothii* (Booth's willow) with lesser amounts of *S. drummondiana* (Drummond's willow) occasionally occur on organic substrates. The low willows, *Salix wolfii* (Wolf's willow), and *S. planifolia* var. *monica* (Planeleaf willow), along with *Betula glandulosa* (bog birch) occur at upper elevations in association with streams, springs, or seeps.

In broad valley bottoms at lower elevations, low shrub wetlands dominated by *Potentilla fruticosa* (shrubby cinquefoil) and *Artemisia* spp. occur in association with springs, seeps, and vernal wetlands. *Artemisia cana* (silver sage) and *Artemisia tridentata* (big sagebrush) often occur on the margins of wetland complexes or on areas with slightly raised topography within wetlands. *Artemisia papposa* (fuzzy sagebrush) and *Artemisia longiloba* (alkali sagebrush) occur in vernal pools and in low gradient vernal drainages. Plant communities dominated by the latter two sagebrush species are poorly documented and described (Jankovsky-Jones, M. 1997).

Palustrine scrub-shrub communities are more common then the Palustrine forested (PFO) communities and make up 20% of the of the Big Wood Drainage wetlands. The shrub communities surveyed in the project area are yellow willow/beaked sedge, sandbar willow/mesic graminoid and shrubby cinquefoil/tufted hairgrass. These communities are listed in Table 2 and ranked globally (G) and by state (S) based on the

Conservation Strategy for the Big Wood River Basin Wetland. Although these communities are not imperiled, the report suggests significant gains in increasing the acreage of shrub-scrub wetlands in the survey area could be made by fencing tributary streams in the Big Wood drainages where willow remnants are present as stringers.

Table 3-2: Palustrine Scrub Shrub Communities in the Project Area

Scientific Name	Common Name	Rank
<i>Salix lutea/Carex rostrata</i>	Yellow willow/Beaked sedge	G4, S4 - Global rank and state rank are not rare and apparently secure, but with cause for long-term concern
<i>Salix exigua/Mesic graminoid</i>	Sandbar willow/Mesic graminoid	G3Q, S3 - Global rank is rare or uncommon with uncertainty about the taxonomic status. State rank is rare or uncommon.
<i>Potentilla fruticosa/Dechampsia cespitosa</i>	Shrubby cinquefoil/Tufted hairgrass	G4, S3 - Global rank is not rare and apparently secure, but with cause for long-term concern. State rank is rare or uncommon but not imperiled.

Emergent (herbaceous) vegetation: Herbaceous wetlands in the basin usually occur as a complex of monocultures dominated by the sedges and sedge-like species including; *Carex utriculata* (beaked sedge), *C. aquatilis* (water sedge), *C. nebraskensis* (Nebraska sedge), *C. praegracilis* (clustered field sedge), *C. simulate* (soft-leaved sedge), *Scirpus validus* (softstem bulrush), and *Eleocharis palustris* (common spikerush). *Typha latifolia* (broadleaf cattail), and *Nuphar polysepalum* (Rocky Mountain pond lily). These are frequently present in ponds with appropriate water regimes.

Tall grasslands in the basin are dominated by *Calamagrostis canadensis* (bluejoint reedgrass) and *Phalaris arundinacea* (reed canarygrass). Temporarily flooded grasslands, dominated by *Deschampsia cespitosa* (tufted hairgrass), *Agropyron smithii* (bluestem wheatgrass), *Poa juncifolia* (alkali bluegrass), or *Spartina gracilis* (alkali cordgrass), were likely formerly widespread in the basin. The latter three species along with *Distichlis spicata* (inland saltgrass) are frequently associated with saline or alkaline seeps. Grasslands are accessible and have largely been impacted by grazing or reseeding with pasture grasses.

The emergent communities surveyed in the project area are listed in Table 3-3 and ranked globally (G) and by state (S) based on the *Conservation Strategy for the Big Wood River Basin Wetlands* (Jankovsky-Jones, M. 1997). This report noted that efforts to protect communities should concentrate on those that are uncommon naturally or due to human disturbances. All the PEM communities in the project area are considered common.

1

Table 3-3: Palustrine Emergent Communities in the Project Area

Scientific Name	Common Name	Rank
<i>Juncus balticus</i>	Baltic rush	G5, S4 Global rank is demonstrably widespread, abundant, and secure. State rank is not rare and apparently secure, but with cause for long-term concern
<i>Phalaris arundinacea</i>	Reed canary grass	G5, S4 Global rank is demonstrably widespread, abundant, and secure. State rank is not rare and apparently secure, but with cause for long-term concern
<i>Carex utriculata</i>	Beaked sedge	G5, S4 Global rank is demonstrably widespread, abundant, and secure. State rank is not rare and apparently secure, but with cause for long-term concern
<i>Carex nebraskensis</i>	Nebraska sedge	G4, S3 Global rank is not rare and apparently secure, but with cause for long-term concern. State rank is rare or uncommon but not imperiled.
<i>Eleocharis palustris</i>	Common spike rush	G5, S3 Global rank is demonstrably widespread, abundant, and secure. State rank is rare or uncommon but not imperiled.

2 **3.4.2 Irrigation Dependent Wetlands**

3

4 Section 3.13.2 SH-75 Corridor Wetlands of the DEIS contained references to both NJ (non-jurisdictional)
5 and I-D (irrigation-dependent wetlands). The correct reference is I-D. The text on page 3-131 of Chapter 3
6 Affected Environment of the DEIS is therefore amended to read as follows:

7 **3.4.2.1 US 20 to Gannett Road**

8 *Natural:* Nineteen of the 21 natural wetlands located in the project corridor occur in this segment. Of
9 these, 13 are PEM (Palustrine emergent) and six are PSS (Palustrine scrub-shrub) communities.
10 There are no natural PFO (Palustrine forested) communities in this segment.

11 *Irrigation-dependent:* Ten irrigation-dependent wetlands are located in this segment. Of these, seven
12 are PEM, and three are PFO communities associated with the valley's extensive irrigation canal and
13 ditch system. For wetland I-D-10, a significant portion of the PFO community parallels the District
14 Canal and SH-75 for approximately 2.5 miles.

**Table 3.13-2: Natural and Irrigation-Dependent Wetlands by Wetland Community Type,
US-20 to Gannett Road**

Community Type	Natural Wetland Number	Irrigation-dependent Wetland Number
PEM	1, 3, 5, 6, 8, 9, 10, 11, 12, 15, 16, 18, and 19	I-D-1, I-D-2, I-D-3, I-D-4, I-D-6, I-D-8, and I-D-9
PSS	2, 4, 7, 13, 14, and 17	None
PFO	None	I-D -5, I-D -7, and I-D -10

3.4.2.2 Gannett Road to Fox Acres Road

Natural: There are no natural wetlands in this segment.

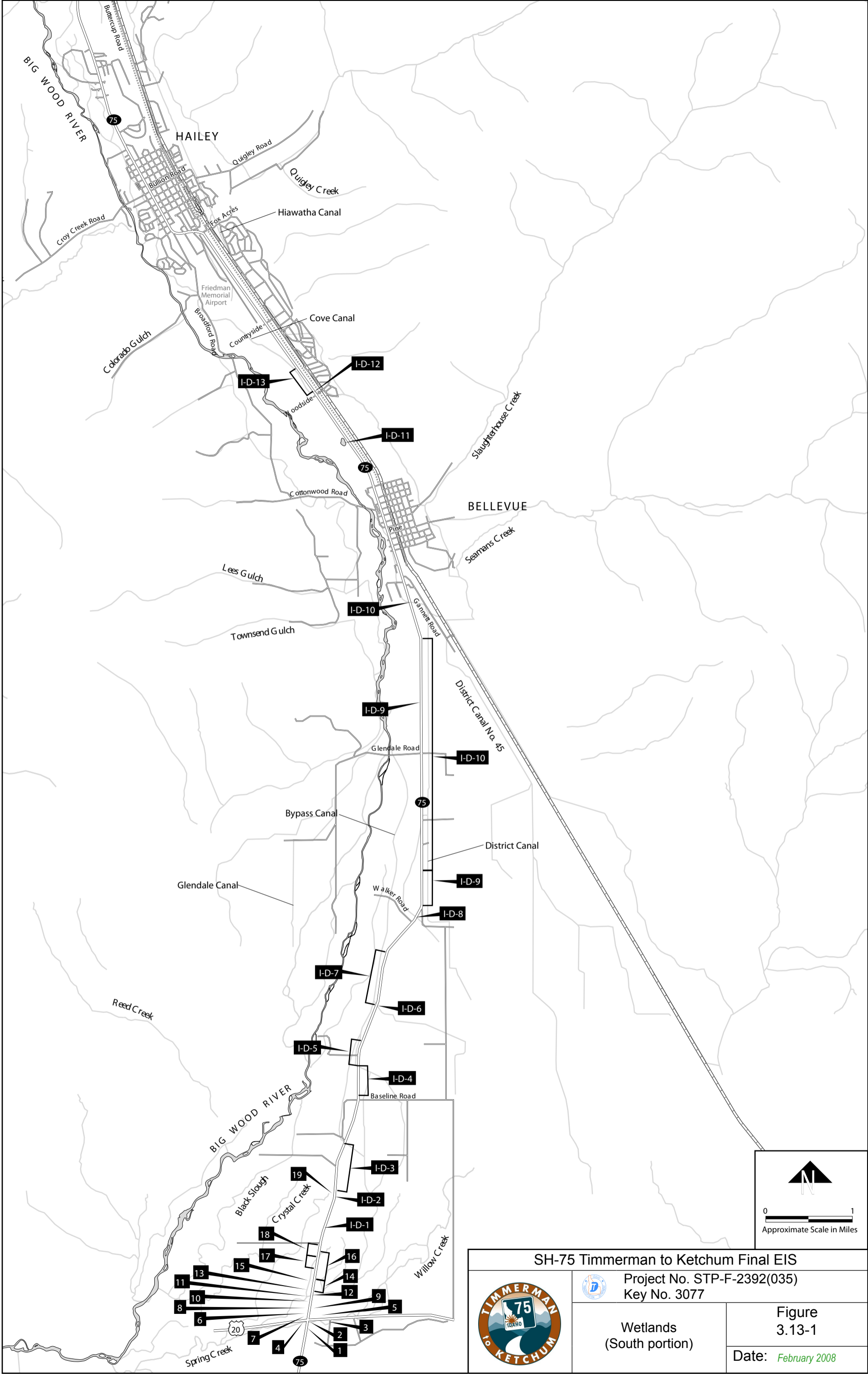
Irrigation-dependent: Three irrigation-dependent wetlands are located in this segment. Of these, two are PEM communities and one is a PFO community. Wetlands I-D-11 and I-D-12 are associated with irrigation ponds, and NJ-13 is associated with an irrigation canal.

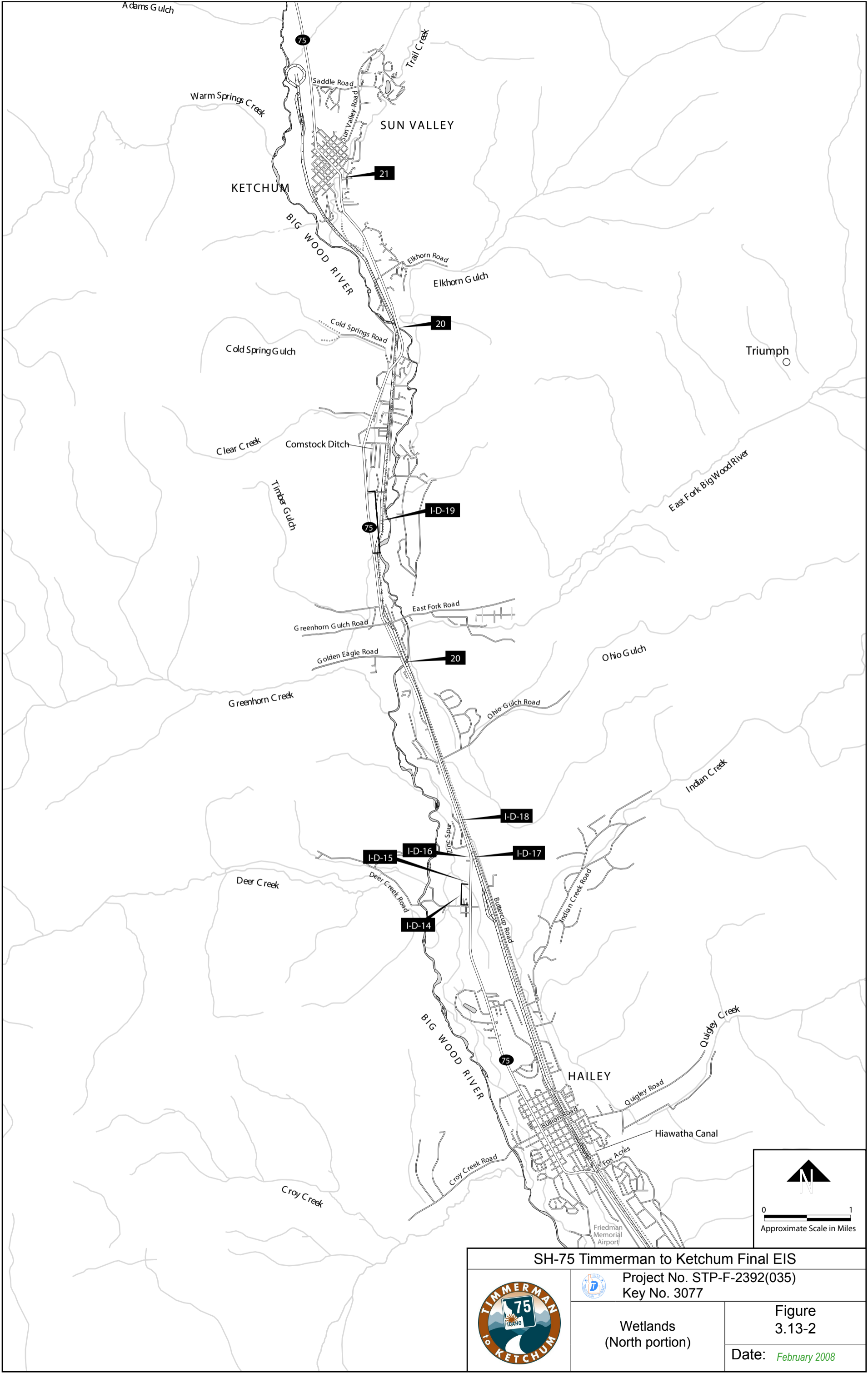
**Table 3.13-3: Natural and Irrigation-Dependent Wetlands by Wetland Community Type,
Gannett Road to Fox Acres**

Community Type	Natural Wetland Number	Irrigation-Dependent Wetland Number
PEM	None	I-D12 and I-D-13
PSS	None	I-D-11
PFO	None	None

Figures 3.13-1 and 3.13-2 are also amended, replacing references to NJ with I-D. The revised figures are included on the following pages.

It should be noted that although I-D wetlands do not necessarily require a Section 404 permit, they are still covered by Executive Order 11990, 23 CFR Part 777 and Department of Transportation Order 5660.1A and must be considered in any mitigation plan.





3.5 Wildlife and Wildlife Habitat *(supplements Section 3.14 of DEIS, page 3-136)*

Supplementary information is provided on changes to the species listed under the Endangered Species Act (ESA), and the status of wildlife crossing research being conducted in Blaine County.

3.5.1 ESA Species

Since publication of the DEIS, the Bald eagle (*Haliaeetus leucocephalus*) has been removed from the United States Fish and Wildlife Service (USFWS) list and is no longer listed under the Endangered Species Act (ESA). Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. At the time of de-listing, USFWS provided National Bald Eagle Management Guidelines¹⁶.

The Snake River Fish and Wildlife Office of the USFWS issues a 90-day species list that updates the list of threatened, endangered, proposed, and candidate species that occur in Idaho. Species list 2008-SL-0073 was provided to ITD in December 2007. This list includes the following species, all of which were considered in the DEIS and evaluated in the Programmatic Biological Assessment included in Volume III Technical Reports, Tab 1 of the DEIS:

- Gray wolf (*Canis lupus*)
- Canada lynx (*Lynx canadensis*)
- Yellow-billed cuckoo (*Coccyzus americanus*)

3.5.2 Wildlife Crossing Research Update

At the time of publication of the DEIS, Blaine County had applied for enhancement funding to gather empirical data on wildlife crossing incidents along SH-75. Subsequent to obtaining that funding, Blaine County, in cooperation with Idaho Transportation Department, hired the Western Transportation Institute at Montana State University (WTI-MSU) to gather more information about the wildlife-vehicle collisions and the potential installation of an animal detection system along SH-75 between the US-20 Timmerman Junction and Ketchum. The ultimate goal is to reduce animal-vehicle collisions, especially with mule deer and elk. The data collection program is referred to as "Ketchum on the Road: Wildlife Sightings". The public is being asked to participate in this effort through submitting wildlife sightings (dead or alive) along this road section. Instructions for, and the reporting is done through a website (www.blainecounty.org) that has been up since March 2007. The data is being collected through March 2008. The analysis of the data and recommendations for any additional wildlife crossing mitigation are scheduled for completion by fall of 2008.

3.6 Fisheries *(supplements Section 3.15 of the DEIS, page 3-159)*

The Snake River Fish and Wildlife Office of the USFWS issues a 90-day species list that updates the list of threatened, endangered, proposed, and candidate species that occur in Idaho. Species list 2008-SL-0073 was provided to ITD in December 2007. This list includes the following species, all of which were considered in the DEIS and evaluated in the Programmatic Biological Assessment included in Volume III Technical Reports, Tab 1 of the DEIS:

- Bull trout (*Salvelinus confluentus*)
- Sockeye salmon Spring/summer Chinook salmon (*Oncorhynchus tshawytscha*)
- Steelhead trout (*Oncorhynchus mykiss*)
- Spring/summer Chinook salmon (*Oncorhynchus tshawytscha*)
- Utah Valvata snail (*Valvata utahensis*)

¹⁶ This guidance is available at the following website:

<http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>